IN THE CLAIMS:

Please cancel claims 31, 34, and 35. Please amend the remaining claims as follows. The following listing of claims will replace all prior versions and listings of claims in the application.

1 – 26. (Cancelled)

27. (Currently Amended) A computer-implemented method for evaluating the performance of an image processing algorithm, the method comprising:

performing a plurality of image processing functions on an image in response to user input;

recording the plurality of image processing functions, wherein the plurality of image processing functions define an image processing algorithm;

receiving user input specifying a plurality of images on which to execute the image processing algorithm;

executing the image processing algorithm on each of the plurality of images;

measuring amounts of time that elapse while executing the image processing algorithm on each of the plurality of images;

determining an average amount of time required to execute the image processing algorithm, based on said measuring the amounts of time that elapse while executing the image processing algorithm on each of the plurality of images; ~~and~~

categorizing the plurality of image processing functions into a plurality of image processing categories, wherein each image processing category includes one or more of the image processing functions;

for each of the plurality of images, measuring an amount of time that elapses during said executing the image processing algorithm for each of the plurality of image processing categories;

determining an average amount of time that elapses during said executing the image processing algorithm for each of the plurality of image processing categories;

displaying information on a display device indicating the average amount of time required to execute the image processing algorithm for the plurality of images~~, wherein~~

~~said displaying the information indicating the average amount of time required to execute the image processing algorithm allows a user to evaluate performance of the image processing algorithm.~~; and

displaying information on the display device indicating the average amount of time that elapses during said executing the image processing algorithm for each of the plurality of image processing categories;

wherein said displaying the information indicating the average amount of time required to execute the image processing algorithm and said displaying the information indicating the average amount of time that elapses during said executing the image processing algorithm for each of the plurality of image processing categories allows a user to evaluate performance of the image processing algorithm.

28. (Currently Amended) The method of claim 27, further comprising:

displaying information indicating a rate at which the image processing algorithm is capable of processing images, based on the average amount of time required to execute the image processing algorithm for the plurality of images.

29. (Previously Presented) The method of claim 27, further comprising:

displaying one or more of the minimum time required and the maximum time required for executing the image processing algorithm.

30. (Currently Amended) The method of claim 27, further comprising:

~~wherein said displaying information comprises~~ displaying time information corresponding to each execution iteration in a structured display.

31. (Cancelled)

32. (Currently Amended) The method of claim 27,

wherein said displaying the information indicating the average amount of time required to execute the image processing algorithm for the plurality of images comprises

displaying a clock icon which visually indicates the average amount of time required to execute the image processing algorithm.

33. (Previously Presented) The method of claim 27, further comprising:

determining an average amount of time required to execute each of the one or more image processing functions; and

displaying information indicating the average amount of time required to execute each of the one or more image processing functions.

34. (Cancelled)

35. (Cancelled)

36. (Previously Presented) The method of claim 27, further comprising:

displaying information indicating memory requirements for one or more of the image processing functions.

37. (Currently Amended) The method of claim 27, further comprising:

~~programmatically~~ automatically generating a graphical data flow diagram that implements the image processing algorithm.

38. (Currently Amended) The method of claim 27, further comprising:

~~programmatically~~ automatically changing the image processing algorithm in order to reduce the execution time of the image processing algorithm.

39. (Currently Amended) The method of claim 27, further comprising:

displaying information indicating suggested changes to the image processing algorithm in order to reduce the execution time of the image processing algorithm;

receiving user input accepting the suggested changes; and

~~programmatically~~ automatically making the ~~indicated~~ suggested changes to the image processing algorithm.

40. (Currently Amended) The method of claim 38,

wherein one or more of the image processing functions have associated parameters;

wherein said ~~programmatically~~ automatically changing the image processing algorithm comprises ~~programmatically~~ automatically changing a parameter value associated with an image processing function.

41. (Currently Amended) A memory medium comprising program instructions for evaluating the performance of an image processing algorithm, wherein the program instructions are executable to implement:

performing a plurality of image processing functions on an image in response to user input;

recording the plurality of image processing functions, wherein the plurality of image processing functions define an image processing algorithm;

receiving user input specifying a plurality of images on which to execute the image processing algorithm;

executing the image processing algorithm on each of the plurality of images;

measuring amounts of time that elapse while executing the image processing algorithm on each of the plurality of images;

determining an average amount of time required to execute the image processing algorithm, based on said measuring the amounts of time that elapse while executing the image processing algorithm on each of the plurality of images; ~~and~~

categorizing the plurality of image processing functions into a plurality of image processing categories, wherein each image processing category includes one or more of the image processing functions;

for each of the plurality of images, measuring an amount of time that elapses during said executing the image processing algorithm for each of the plurality of image processing categories;

determining an average amount of time that elapses during said executing the image processing algorithm for each of the plurality of image processing categories;

displaying information on a display device indicating the average amount of time required to execute the image processing algorithm for the plurality of images~~, wherein said displaying the information indicating the average amount of time required to execute the image processing algorithm allows a user to evaluate performance of the image processing algorithm.~~; and

displaying information on the display device indicating the average amount of time that elapses during said executing the image processing algorithm for each of the plurality of image processing categories;

wherein said displaying the information indicating the average amount of time required to execute the image processing algorithm and said displaying the information indicating the average amount of time that elapses during said executing the image processing algorithm for each of the plurality of image processing categories allows a user to evaluate performance of the image processing algorithm.

42. (Currently Amended) The memory medium of claim 41, wherein the program instructions are further executable to implement:

displaying information indicating a rate at which the image processing algorithm is capable of processing images, based on the average amount of time required to execute the image processing algorithm for the plurality of images.

43. (Previously Presented) The memory medium of claim 41, wherein the program instructions are further executable to implement:

displaying one or more of the minimum time required and the maximum time required for executing the image processing algorithm.

44. (Currently Amended) The memory medium of claim 41, wherein the program instructions are further executable to implement:

~~wherein said displaying information comprises~~ displaying time information corresponding to each execution iteration in a structured display.

45. (Currently Amended) The memory medium of claim 41,

wherein said displaying the information indicating the average amount of time required to execute the image processing algorithm for the plurality of images comprises displaying a clock icon which visually indicates the average amount of time required to execute the image processing algorithm.

46. (Previously Presented) The memory medium of claim 41, wherein the program instructions are further executable to implement:

determining an average amount of time required to execute each of the one or more image processing functions; and

displaying information indicating the average amount of time required to execute each of the one or more image processing functions.

47. (Currently Amended) A memory medium comprising program instructions for creating an image processing algorithm, wherein the program instructions are executable to implement:

performing one or more image processing functions on an image in response to user input;

recording the one or more image processing functions, wherein the one or more image processing functions define an image processing algorithm;

receiving user input specifying desired execution time criteria for the image processing algorithm;

executing the image processing algorithm in response to user input;

measuring an execution time that elapses during said executing the image processing algorithm; and

~~programmatically~~ automatically changing the image processing algorithm based on the specified execution time criteria in order to reduce the execution time of the image processing algorithm, wherein said ~~programmatically~~ automatically changing the image processing algorithm is not performed directly in response to user input.

48. (Currently Amended) The memory medium of claim 47, wherein the program instructions are further executable to implement:

receiving user input to undo the changes made to the image processing algorithm in said ~~programmatically~~ automatically changing.

49. (Currently Amended) The memory medium of claim 47, wherein said ~~programmatically~~ automatically changing the image processing algorithm comprises ~~programmatically~~ automatically changing one or more parameters of at least one image processing function in the image processing algorithm.

50. (Currently Amended) The memory medium of claim 47, wherein said ~~programmatically~~ automatically changing the image processing algorithm comprises ~~programmatically~~ automatically changing a number of pixels used in at least one image processing function in the image processing algorithm.

51. (Currently Amended) A computer-implemented method for creating an image processing algorithm, comprising:

performing one or more image processing functions on an image in response to user input;

recording the one or more image processing functions, wherein the one or more image processing functions define an image processing algorithm;

receiving user input specifying desired execution time criteria for the image processing algorithm;

executing the image processing algorithm in response to user input;

measuring an execution time that elapses during said executing the image processing algorithm; and

~~programmatically~~ automatically changing the image processing algorithm based on the specified execution time criteria in order to reduce the execution time of the image processing algorithm, wherein said ~~programmatically~~ automatically changing the image processing algorithm is not performed directly in response to user input.

52. (Currently Amended) The method of claim 51, further comprising:

receiving user input to undo the changes made to the image processing algorithm in said ~~programmatically~~ automatically changing.

53. (Currently Amended) The method of claim 51, wherein said ~~programmatically~~ automatically changing the image processing algorithm comprises ~~programmatically~~ automatically changing one or more parameters of at least one image processing function in the image processing algorithm.

54. (Currently Amended) The method of claim 51, wherein said ~~programmatically~~ automatically changing the image processing algorithm comprises ~~programmatically~~ automatically changing a number of pixels used in at least one image processing function in the image processing algorithm.

55. (Currently Amended) A memory medium comprising program instructions for creating an image processing algorithm, wherein the program instructions are executable to implement:

performing one or more image processing functions on an image in response to user input;

recording the one or more image processing functions, wherein the one or more image processing functions define an image processing algorithm;

executing the image processing algorithm in response to user input;

measuring an execution time that elapses during said executing the image processing algorithm;

~~programmatically determining~~ automatically generating one or more suggested changes to the image processing algorithm ~~in order to reduce~~ for reducing the execution time of the image processing algorithm; and

displaying information indicating the one or more suggested changes.

56. (Currently Amended) The memory medium of claim 55, wherein the program instructions are further executable to implement:

receiving user input accepting one or more of the suggested changes; and

~~programmatically~~ automatically making the accepted changes to the image processing algorithm.

57. (Currently Amended) The memory medium of claim 55,

wherein one or more of the image processing functions have associated parameters;

wherein said ~~programmatically determining~~ automatically generating one or more suggested changes comprises ~~programmatically determining~~ automatically generating at least one suggested change to a parameter value associated with an image processing function.

58. (Currently Amended) The memory medium of claim 55, wherein the program instructions are further executable to implement:

receiving user input specifying desired execution time criteria;

wherein said ~~programmatically determining~~ automatically generating one or more suggested changes is performed based on said execution time criteria.

59. (Currently Amended) A computer-implemented method for creating an image processing algorithm, comprising:

performing one or more image processing functions on an image in response to user input;

recording the one or more image processing functions, wherein the one or more image processing functions define an image processing algorithm;

executing the image processing algorithm in response to user input;

measuring an execution time that elapses during said executing the image processing algorithm;

automatically generating one or more suggested changes to the image processing algorithm for reducing the execution time of the image processing algorithm;

displaying information indicating the one or more suggested changes to the image processing algorithm ~~in order to reduce the execution time of the image processing algorithm~~;

receiving user input accepting one or more of the suggested changes; and

~~programmatically~~ automatically making the accepted changes to the image processing algorithm.